

SPECIAL FORECASTS AND WARNINGS. WEATHER AND CROPS.

WEATHER WARNINGS, JULY, 1919.

EDWARD H. BOWIE, Supervising Forecaster.

During the month of July there were no abnormal atmospheric phenomena to be handled by the forecasters, except for frequent occasions for the issue of fire weather warnings in the far Western and Northwestern States and the necessity for frequent forecasts of rains for the Eastern and Southern States.

WASHINGTON DISTRICT.

The forecaster was called on during the month to issue many forecasts of showers, rains, and thunderstorms in the Atlantic and east Gulf States, in which regions the month was unusually rainy. Few storm warnings were necessary. On the 3d storm warnings were issued for the east Gulf coast when a disturbance was developing over the Gulf of Mexico. This disturbance passed inland immediately east of Pensacola, Fla., on the 4th and moved northward and disappeared over Tennessee on the 5th.

FORECASTS FOR THE "R-34."

The visit of the British dirigible the *R-34* was the occasion for the issue of daily forecasts for that airship before, during, and after its visit to our country. The first call for meteorological information and forecasts was received from the commander of this airship when she was off Newfoundland, and it was by radio through the shore station at Cape Race. Immediately on receipt of this call information of the prevailing weather and winds along the American coast north of New York and forecasts of wind and weather for the succeeding 24 hours were sent twice each day by radio until the airship reached Long Island. Perhaps the most important information contained in these advices was sent when the airship was flying westward between Nova Scotia and Cape Cod and encountering head winds. The prediction was to the effect that the winds would change to the northeast. Unquestionably this change in wind was most timely and enabled the airship to reach its destination without the aid of assistance from torpedo boats. During all the time that the *R-34* was moored at the flying field on Long Island, advices three times each day concerning the probable wind and weather were supplied its commander. Its dramatic departure was made on urgent advices from the Weather Bureau to the effect that a storm was approaching rapidly from the Great Lakes, that the wind and weather conditions, then favorable for a homeward start, would continue but a few hours longer, and that to remain moored on the flying field would be at the risk of having the airship torn from its moorings and swept away by winds and squalls that would set in before the expiration of the night. This bulletin was sent as an urgent message at 9 p. m. of the 10th, and shortly after midnight the *R-34* started her homeward flight under exceptionally favor-

able wind and weather conditions.¹ The next morning a half gale was blowing on Long Island, and general atmospheric conditions were most dangerous for an unprotected airship.

WARNINGS FROM OTHER DISTRICTS.

Chicago, Ill., Forecast District.—No warnings were issued during the month.—*Chas. L. Mitchell.*

New Orleans, La., Forecast District.—On the 3d conditions became locally threatening during the passage of a Gulf disturbance toward the East Gulf coast, and northeast storm warnings were ordered for the Louisiana coast at 12:30 p. m. The influence of the storm was evident at the mouth of the river, but its course was too far to the east to cause more than fresh winds on the Louisiana coast.

Small craft warnings were displayed on the Texas coast on the 6th because of disturbed conditions over southern Texas.

A number of thunderstorms occurred in coast sections, but there were no general storms without warnings.—*R. A. Dyke.*

Denver Forecast District.—The feature of the month was the continuation of the drought in northwestern Colorado, northern Utah, and adjacent regions to the northward, while heavy rains were even more common than usual in northern New Mexico and northern Arizona, with washouts and serious delays to railroad traffic. The rainfall was almost invariably in the form of thunderstorms, which were well covered in the forecasts. Fire weather warnings were issued on the morning of the 5th for fresh to strong winds in western Utah and northwestern Colorado.—*Fred'k H. Brandenburg.*

San Francisco, Calif., District.—The high temperatures and deficient rainfall caused the forest areas to become exceedingly dry and favorable for forest fires and as a matter of fact, large and destructive fires raged over the northeastern portion of this district during the greater part of the month. Fire weather warnings were issued in Washington, Oregon, and Idaho on the 7th, 10th, 15th, 18th, 21st, and 23d; in Nevada and northern California on the 7th, 10th, and 24th; in Nevada on the 21st; and in southern California on the 7th and 18th. These warnings covered periods of from three to four days in advance and the results were very gratifying.

The following commendations were received:

Your forecasts so far have been very accurate and beneficial.—*State Forester, Washington.*

I want you to know that we have been very much pleased with the fire weather predictions so far. They have been very nearly correct so far and we are much pleased that they have been so helpful.—*Forest Supervisor, Medford, Oreg.*

No wind or frost warnings were issued and none were necessary.—*G. H. Willson.*

¹ A full account of the meteorological conditions accompanying this flight is being prepared for the August issue of the MONTHLY WEATHER REVIEW.